CLAIMS

What is claimed is:

1.   A method of transferring data to a target device across a network via encapsulated packets wherein each of at least some of the packets comprise a split-ID.

5   2.   The method of claim 1 wherein the target device comprises a plurality of storage areas and the device associates a network address with each of the plurality of storage areas.

3.   The method of claim 2 wherein the split-ID comprises a network address associated with one of the storage areas of the target device, and the network address is also used to route the encapsulating packet to the target device.

10   4.   The method of claim 3 wherein the network address is an IP address located in a control portion of an encapsulating IP packet.

5.   The method of claim 4 wherein at least some of the packets comprise a command and a token where the token of a packet is used by the target device to determine whether to execute the command of the packet.

15   6.   The method of claim 4 wherein each storage area associated with an IP address is also associated with a client device that is not the target device, and the packet comprises a command, and the command is executed only if the packet appears to have been sent by the client device associated with the storage area that is associated with the IP address of the split-ID of the packet.

20   7.   The method of claim 6 wherein executing the command causes the target device to obtain data from a third device that is neither the target device nor the client device.

8.   The method of claim 7 wherein the target device and the third device are separated by a NAT bridge.

9.   The method of claim 1 wherein at least some of the packets are PSAN packets.

10. The method of claim 1 wherein the method is adapted for communicating a block of data to a device for subsequent manipulation by the device, the method further comprising dividing the block of data into an ordered set of sub-blocks, transferring the sub-blocks to

5 the device in a manner that permits the blocks to be received by the device in an order other than the order in which they were transmitted, and the device manipulates the sub-blocks without first re-ordering the block.

11. A network comprising at least one device that has a set of storage areas, each storage area comprising a set of storage blocks, wherein packets on the network can be addressed to

10 particular storage areas within the at least one device, and each of at least some of the packets comprises a block identifier identifying a storage block within the storage area the packet is addressed to.

12. The network of claim 11 wherein the network is an IP network, and the at least one device associates an IP address with each storage area of the set of storage areas.

15 13. The network of claim 12 wherein the at least one device obtains any IP addresses associated with storage areas from a network address server.

14 The network of claim 13 wherein the block identifier of the at least some packets comprising block identifiers is located in the control portion of a PSAN packet encapsulated in an IP packet.

20 15 A device coupled to a network and adapted to process at least some PSAN packets.

16. The device of claim 15 wherein the device comprises a set of storage areas, each storage area comprises a set of storage blocks, and the device associates an IP address with each storage area of the set of storage areas.

17. The device of claim 16 wherein the devices is adapted to receive a block of data wherein

25 the block of data is divided into sub-blocks and the device manipulates the sub-blocks without first re-assembling the block.

18.   The device of claim 17 wherein the device is adapted to respond to requests for data and the device is adapted to send a only a single block of data per request.